

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-25 (cancelled)

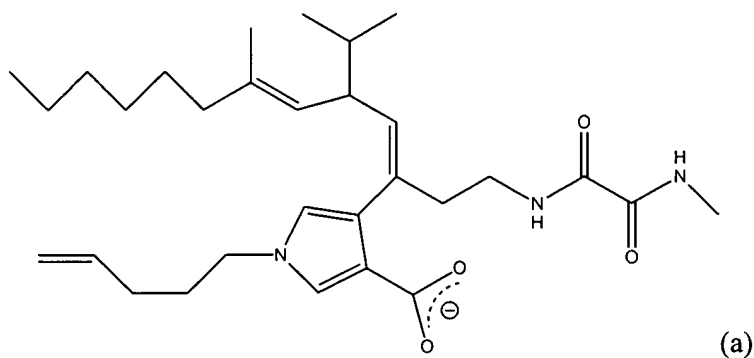
Claim 26 (previously presented): A method for the treatment of metabolic diseases in a mammal comprising co-administration to said mammal of (i) a compound capable of binding to a secondary binding site of DPIV and DPIV like enzymes and (ii) at least one anti-diabetic agent.

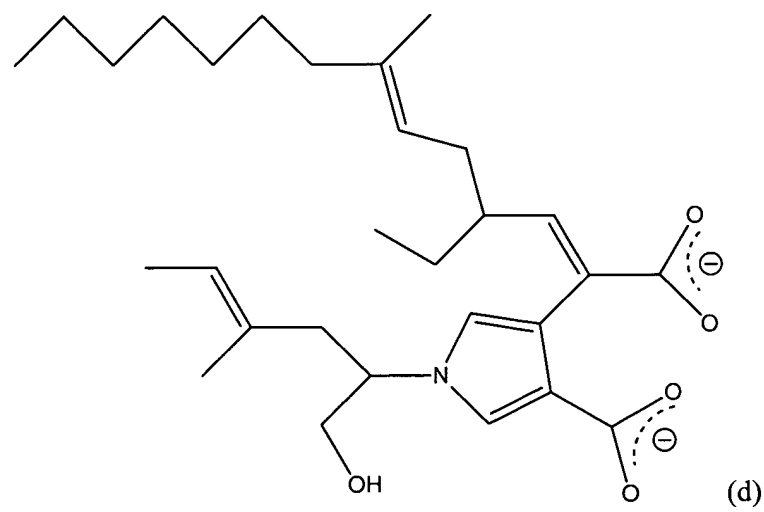
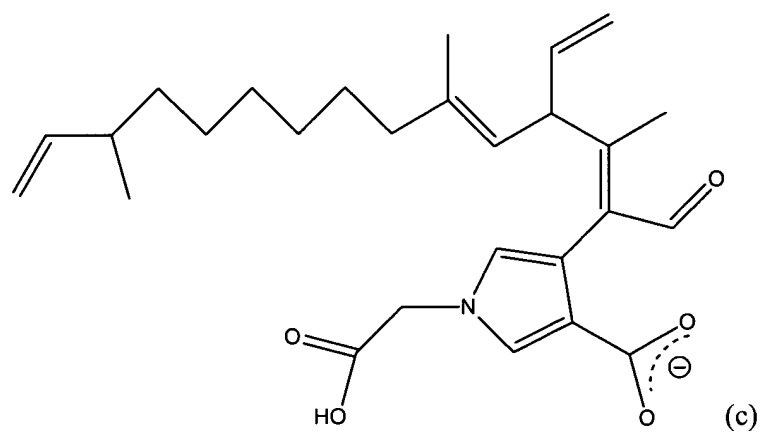
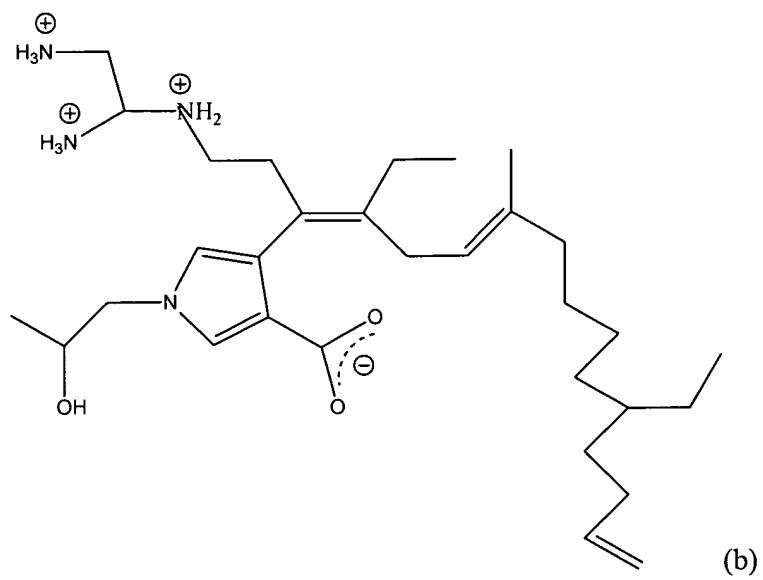
Claim 27 (previously presented): A method for the treatment of metabolic diseases in a mammal comprising co-administration to said mammal of (i) a compound capable of binding to a secondary binding site of DPIV and DPIV like enzymes and (ii) at least one anti-diabetic agent selected from the group consisting of:

- DP IV inhibitors;
- PPAR agonists;
- biguanides, e.g. metformin, phenformin or buformin;
- protein tyrosin phosphatase-1B (PTP-1B) inhibitors;
- insulin and insulin mimetics;
- sulfonylureas and other insulin secretagogues;
- α -glucosidase inhibitors or acarbose;
- glucagon receptor agonists;
- GLP-1, GLP-1 mimetics, and GLP-1 receptor agonists;
- GLP-2, GLP-2 mimetics, and GLP-2 receptor agonists or teduglutide;
- exendin-4, exendin-4 mimetics, exenatide;
- GIP, GIP mimetics, and GIP receptor agonists;
- PACAP, PACAP mimetics, and PACAP receptor 3 agonists;
- PYY, PYY mimetics, PYY receptor agonists, and PYY receptor antagonists;

- one or more cholesterol lowering agents selected from the group consisting of :
 - HMG-CoA reductase inhibitors,
 - sequestrants,
 - nicotinyl alcohol, nicotinic acid and salts thereof,
 - PPAR α agonists,
 - PPAR γ agonists,
 - PPAR α/γ dual agonists,
 - inhibitors of cholesterol absorption,
 - acyl CoA:cholesterol acyltransferase inhibitors, and
 - antioxidants;
- PPAR δ agonists;
- anti-obesity compounds;
- an ileal bile acid transporter inhibitor; and
- anti-inflammatory agents.

Claim 28 (currently amended): The treatment method according to claim 27 wherein the compound is selected from the group comprising: a consensus sequence of the GRF-peptide family, TFTSDY (SEQ ID NO:1), TFTDDY (SEQ ID NO:4), H-Ser-D-Glu-Thr-Gly-D-Val-D-Lys-D-Val-OH, and compounds of formulas a) to d):





Claim 29 (previously presented): The treatment method according to claim 27 wherein the anti-diabetic agent is selected from DPIV inhibitors, metformin, exenatide, exendin-4, acarbose, insulin, and sulfonylureas.

Claim 30 (previously presented): The treatment method according to claim 27 wherein the metabolic disease is selected from Syndrome X, impaired glucose tolerance, glucosuria, lipid disorders, dyslipidemia, hyperlipidemia, hypertriglyceridemia, hypercholesterolemia, low HDL levels, high LDL levels, metabolic acidosis, hyperglycemia, diabetes mellitus, diabetic neuropathy and nephropathy and of sequelae caused by diabetes mellitus in mammals, metabolism-related hypertension and cardiovascular sequelae caused by hypertension in mammals.

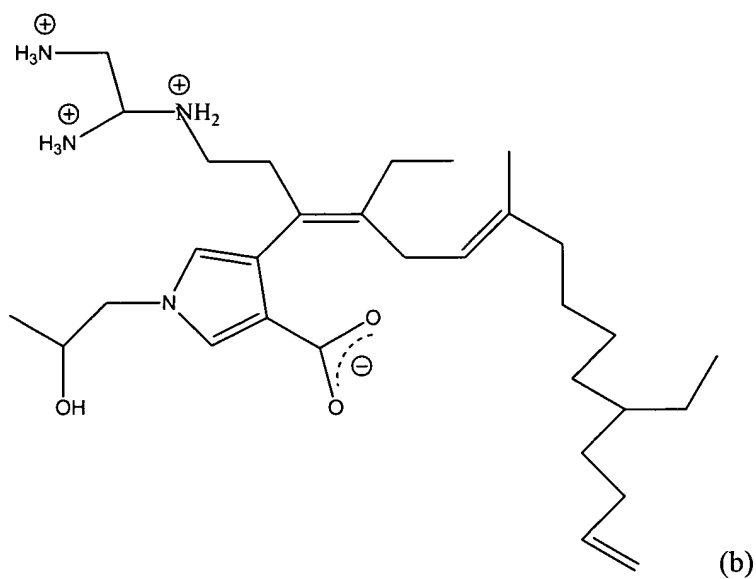
Claim 31 (previously presented): The treatment method according to claim 27 for the prophylaxis and/or treatment of skin diseases, diseases of the mucosa, autoimmune diseases, inflammatory conditions, psychosomatic, neuropsychiatric and depressive illnesses, such as anxiety, depression, sleep disorders, chronic fatigue, schizophrenia, epilepsy, nutritional disorders, spasm and chronic pain, atherosclerosis and its sequelae, vascular restenosis, irritable bowel syndrome, inflammatory bowel disease, including Crohn's disease and ulcerative colitis, other inflammatory conditions, pancreatitis, abdominal obesity, neurodegenerative disease, retinopathy, nephropathy, ovarian hyperandrogenism (polycystic ovarian syndrome), growth hormone deficiency, neutropenia, tumor metastasis, benign prostatic hypertrophy, gingivitis, osteoporosis, and other conditions.

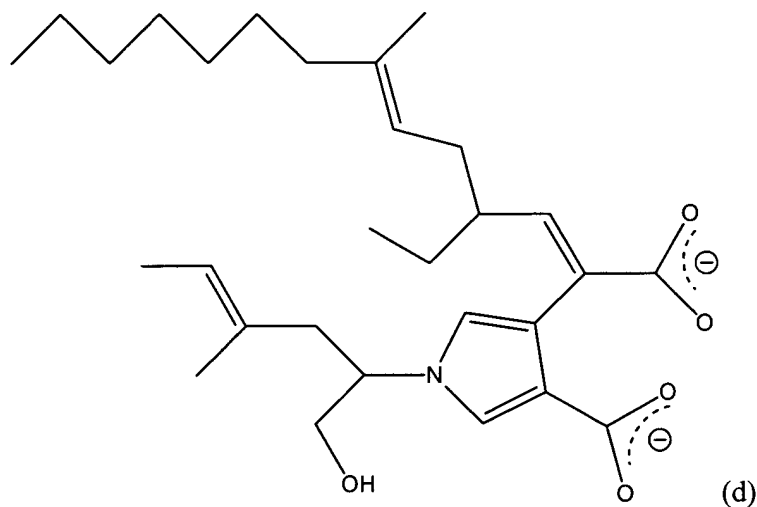
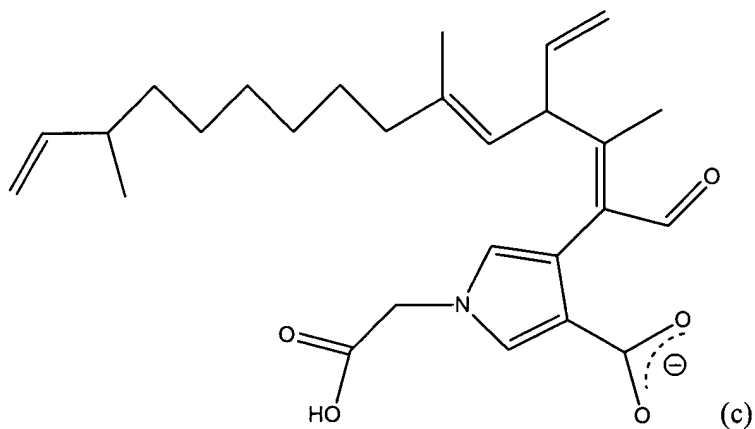
Claim 32 (previously presented): A pharmaceutical composition comprising a compound capable of binding to a secondary binding site of DP IV and DP IV like enzymes, at least one anti-diabetic agent and a pharmaceutically acceptable carrier therefore.

Claim 33 (previously presented): The pharmaceutical composition of claim 32 wherein said at least one anti-diabetic agent is selected from the group consisting of:

- DP IV inhibitors;
- PPAR agonists;
- biguanides, e.g. metformin, phenformin or buformin;
- protein tyrosin phosphatase-1B (PTP-1B) inhibitors;
- insulin and insulin mimetics;
- sulfonylureas and other insulin secretagogues;
- α -glucosidase inhibitors or acarbose;
- glucagon receptor agonists;
- GLP-1, GLP-1 mimetics, and GLP-1 receptor agonists;
- GLP-2, GLP-2 mimetics, and GLP-2 receptor agonists or teduglutide;
- exendin-4, exendin-4 mimetics, exenatide;
- GIP, GIP mimetics, and GIP receptor agonists;
- PACAP, PACAP mimetics, and PACAP receptor 3 agonists;
- PYY, PYY mimetics, PYY receptor agonists, and PYY receptor antagonists;
- one or more cholesterol lowering agents selected from the group consisting of:
 - HMG-CoA reductase inhibitors,
 - sequestrants,
 - nicotiny alcohol, nicotinic acid and salts thereof,
 - PPAR α agonists,
 - PPAR γ agonists,
 - PPAR α/γ dual agonists,
 - inhibitors of cholesterol absorption,
 - acyl CoA:cholesterol acyltransferase inhibitors, and
 - antioxidants;
- PPAR δ agonists;
- anti-obesity compounds;
- an ileal bile acid transporter inhibitor; and
- anti-inflammatory agents.

(a)





Claim 35 (currently amended): The pharmaceutical composition of claim 32 wherein said compound is TFTSDY (SEQ ID NO:1) or TFTDDY (SEQ ID NO:4).

Claim 36 (previously presented): The pharmaceutical composition of claim 32 wherein said compound is H-Ser-D-Glu-Thr-Gly-D-Val-D-Lys-D-Val-OH.

Claim 37 (previously presented): The pharmaceutical composition of claim 32 wherein said compound capable of binding to a secondary binding site of DP IV and/or DP IV-like enzymes modulates the selectivity and/or activity of DP IV or DP IV-like enzymes in a mammal.

Claim 38 (previously presented): The pharmaceutical composition of claim 32 wherein said compound capable of binding to a secondary binding site of DP IV and/or DP IV-like enzymes substantially prevents of the interaction of DPIV or DPIV-like enzymes with their binding proteins in a mammal.

Claim 39 (previously presented): The pharmaceutical composition of claim 32 wherein said secondary binding site of DPIV and DPIV like enzymes comprises the amino acid residues L90, E91, T152, W154, W157, R310, Y330, R318, Y416, S460, K463, E464 and R560 of DP IV.

Claim 40 (previously presented): The pharmaceutical composition of claim 32 wherein said secondary binding site of DPIV and DPIV like enzymes comprises the amino acid residues Glu361 and Ile407 and Nε2 of His363 of DP IV.

Claim 41 (previously presented): The treatment method according to claim 27 wherein the compound blocks the product release site of DP IV and/or DP IV-like enzymes.

Claim 42 (previously presented): The treatment method according to claim 27 wherein the compound substantially prevents the tetramerization of DP IV and/or DP IV-like enzymes.

Claim 43 (previously presented): The treatment method according to claim 27 wherein the compound comprises 3 to 20 amino acid residues.

Claim 44 (previously presented): The treatment method according to claim 27 wherein the compound comprises 5 to 12 amino acid residues.

Claim 45 (previously presented): The treatment method according to claim 27 wherein the compound comprises 5 to 7 amino acid residues.